

CLAIMS

1. A display device that displays an image based on
image data supplied from a center device,

5 the display device comprising:

 receiving means for receiving data from the center
device; and

 control means for controlling the display device,

 the control means including:

10 visual disturbance hiding means that hides disturbance
in the image on account of image switching, when the display
device obtains, via the receiving means, switching-related
data indicating information with regard to the image
switching of the image data by the center device.

15

 2. The display device as defined in claim 1, wherein, the
switching-related data indicates that the image switching has
been completed.

20 3. The display device as defined in claim 1, wherein, a
period during which the visual disturbance hiding means
hides the disturbance is set in accordance with a delay time
from receipt of the image data to display of the image.

25 4. The display device as defined in claim 1, further

comprising:

decoding means that decodes the image data having been encoded,

a period during which the visual disturbance hiding means hides the disturbance being set in accordance with a period required for decoding the image data by the decoding means.

5. The display device as defined in claim 1, wherein, the visual disturbance hiding means starts to hide the disturbance when a delay time from receipt of the image data to display of the image elapses from a time point of acquiring the switching-related data.

10 6. The display device as defined in claim 1, further comprising:

decoding means for decoding the image data having been encoded,

the visual disturbance hiding means starting to hide the disturbance when a certain time elapses from a time point of acquiring the switching-related data, the certain time being shorter than the delay time by a time required for decoding the image data by the decoding means.

25 7. A display device that displays an image based on

image data supplied from a center device,

the display device comprising:

receiving means for receiving data from the center device;

5 decoding means for decoding the image data having been encoded; and

control means for controlling the display device,

the control means including visual disturbance hiding means that hides disturbance of the image on account of 10 image switching of the image data by the center device, and

the visual disturbance hiding means determining when to stop hiding the disturbance, in accordance with a time point at which the display device receives, via the receiving means, a first stamp generated when the center device 15 encodes the switched image data.

8. The display device as defined in claim 7, wherein, a time when the visual disturbance hiding means stops hiding the disturbance is determined in accordance with (i) a time point of acquiring the first time stamp and (ii) a second time stamp indicating when the decoding means starts to decode the image data.

9. The display device as defined in claim 1 or 7, wherein, 25 the visual disturbance hiding means hides the disturbance of

the image by stopping displaying the image.

10. The display device as defined in claim 1 or 7, further comprising transmission means for transmitting data to the
5 center device,

the control means further including switching command transmission control means for controlling and causing the transmission means to transmit, to the center device, switching demand data that demands switching of the image
10 data.

11. A center device that transmits image data to a display device in order to display an image on the display device,

15 the center device comprising:
transmission means for transmitting data to the display device;

image switching means for switching the image data to be transmitted; and

20 control means for controlling the center device,
the control means including switching-related data transmission control means that obtains switching-related data indicating information regarding an operation of switching the image data by the image switching means, so as
25 to control and cause the transmission means to send the

obtained switching-related data to the display device.

5

12. The center device as defined in claim 11, wherein,
the switching-related data indicates that the image switching
means has finished the operation of switching the image data.

10

13. The center device as defined in claim 11, further
comprising encoding means for encoding the image data,
the transmission means transmitting, to the display
device, the image data encoded by the encoding means.

15

14. A center device that transmits image data to a
display device in order to display an image on the display
device,

the center device comprising:
transmission means for transmitting data to the display
device;

image switching means for switching the image data to
be transmitted;

20

encoding means for encoding the image data; and
control means for controlling the center device,
the control means including time stamp transmission
control means that controls and causes the transmission
means to obtain a first time stamp generated when the
25 encoding means encodes the image data switched by the

image switching means, and transmit the obtained first time stamp to the display device.

15. The center device as defined in claim 11 or 14,
5 further comprising receiving means for receiving data from
the display device,

the control means further including:

switching demand acquiring means for acquiring, via the receiving means, switching demand data that demands 10 switching of the image data; and

image switching control means for controlling and causing the image switching means to switch the image data in accordance with the switching demand data obtained by the switching demand acquiring means.

15

16. The center device as defined in claim 11 or 14, wherein, the image switching means is a tuner for selecting image data of being currently broadcast.

20

17. The center device as defined in claim 11 or 14, wherein, the image switching means is a selector that selects one of sets of image data supplied from outside.

25

18. An image display system, wherein the center device defined in any one of claims 11-17 sends the image data to

the display device defined in any one of claims 1-10, and the display device displays an image based on the image data.

5 19. The image display system as defined in claim 18, wherein, the display device is attachable to the center device.

20. A display device control method for controlling a display device that displays an image based on image data supplied from a center device,

10 the display device including receiving means that receives data from the center device,

 the method comprising the step of:

 when the display device obtains, via the receiving means, switching-related data indicating information regarding image switching of the image data by the center device, hiding disturbance of the image as a result of the image switching.

15 21. A display device control method for controlling a display device that displays an image based on image data supplied from a center device,

20 the display device including: receiving means for receiving data from the center device; and decoding means for decoding the image data having been encoded,

 the method comprising the steps of:

25 hiding disturbance of the image, which is caused by

image switching of the image data by the center device; and
determining a time to stop hiding the disturbance, based
on a time when the display device obtains, via the receiving
means, a first time stamp generated when the center device
encodes the switched image data.

5

22. A center device control method for controlling a
center device that sends image data to a display device in
order to display an image on the display device,

10

the center device including: transmission means for
transmitting data to the display device; and image switching
means for switching the image data to be transmitted,

the method comprising the step of:

15

controlling and causing the transmission means to
obtain switching-related data indicating information regarding
an operation that the image switching means switches the
image data, and to transmit the obtained switching-related
data to the display device.

20

23. A center device control method for controlling a
center device that transmits image data to a display device in
order to display an image on the display device,

25

the center device including: transmission means for
transmitting data to the display device; image switching
means for switching the image data to be transmitted; and

encoding means for encoding the image data,

the method comprising the step of:

controlling and causing the transmission means to obtain a first time stamp generated when the encoding means encodes the image data switched by the image switching means, and to transmit the obtained first time stamp to the display device.

5

10

24. A display device control program for operating the display device defined in any one of claims 1-10, the display device control program causing a computer to function as the control means.

15

25. A center device control program for operating the center device defined in any one of claims 11-17, the center device control program causing a computer to function as the control means.

20

26. A computer-readable recording medium storing the display device control program defined in claim 24 and/or the center device control program defined in claim 25.